INDEX TO VOLUME 43

METAL FINISHING, January-December, 1945

ARTICLES

A

Abrasive Processes, Animal Glue in 415
A. E. S. Delegates at Pittsburgh, June 18th, One Day Meeting held by 276
All Our Yesterdays 452
Aluminum, Anodizing 500
Analysis of Hydrofluoric—Nitric Acid Stainless Steel Pickling Bath 332
Analysis of Silver Plating Solutions, A Simple Electrometric Method 374
Animal Glue in Abrasive Processes 415
Anode Rod, New Adjustable 13
Anodizing Aluminum 500
Area of Parts to be Plated, Determining the 94
Automatic Conveyor, Plating of Die Castings on Full 287

B

B.N.F. Adhesion Test, Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the 191, 245
Burring of Steel Pipe, Power Brush 158

C

California, News from 47, 80, 136, 180, 232, 271, 314, 356, 402, 433, 480, 525
Ceilings for Metal Finishing Services 195
Chemical Processing Prior to Plating and Anodizing 368
Choice of Plated Coatings, The 154
Chromium Plating, Etching Steel with Oxalic Acid Before Industrial 364
Cleaning Before Packaging 496
Coating Gage, A New Thickness 412
Continuous Plating of Fine Steel Wire with Nickel.. 97
Contribution of Electroplating Directly to the War Effort, The 8
Copper and Brass, Black Anodizing 247
Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits, Electrolytic Determination of 458
Corrosion in the Tropics 326
Corrosion Testing, New Design of Humidity Cabinet for 56
Cronak Processes as Applied to Zinc Plate, The ... 148
Cyanide Bath, A High pH Indium 60

D

Deposition of Metals From Fluoborate Solutions, The 188, 242
Descaling Process, The Sodium Hydride 492
Determining the Area of Parts to be Plated 94
Developments of 1944, Technical 2

E

Electrodeposition of Iron-Tungsten Alloys from an Acid Plating Bath 150
Electrodeposition of Silver and Copper from their Simplest Salts 330
Electrodeposits, Nomograph on Thickness of 147
Electrolytic Analysis of Strike Solutions 497
Electrolytic Determination of Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits 458
Electrolytic Polishing of Stainless Steel and Other Metals 280
Electrometric Method, Analysis of Silver Plating Solutions—A Simple 374
Electroplating Directly to the War Effort, The Contribution of 8
Electroplating Exhibit 207
Electroplating, The Future of 334
Engineering, Human 277
Exhibit, Electroplating 207
Etching Steel with Oxalic Acid Before Industrial Chromium Plating 364

F

Fluoborate Solutions, The Deposition of Metals From 188, 242
Fundamentals of Science Relating to Electroplating 371, 410
Future of Electroplating, The 334

G

Gold Deposits, Wearing Qualities of 329

H

Heating and Agitating Small Tanks 406
High pH Indium Cyanide Bath, A 60
High-Speed Alkaline Tin Plating 52, 100
Human Engineering 277
Hydrofluoric—Nitric Acid Stainless Steel Pickling Bath, Analysis of 332

I

Indirect Performance Tests—Metal Cleaning: I 238
Iron-Tungsten Alloys from an Acid Plating Bath, Electrodeposition of 150
Insoluble Anodes, Plating With 144
Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the B.N.F. Adhesion Test 191, 245

L

Laboratory Control of Plating Operations 200
Locomotive and Passenger Equipment Car Parts, Plating 14

M

Magnesium and Magnesium Alloys, The Treatment of 408
Master Metal Finishers Association of New England, Inc. 331
Metal Cleaning: I—Indirect Performance Tests 238
Metal Finishers Association of New England, Inc., Master 331
Metal Finishing Services, Ceilings for 195
Metallizing Non-Conductors 10, 61, 103
Metal Spraying School, Pear Harbor's 450

N

New Adjustable Anode Rod 13
New Design of Humidity Cabinet for Corrosion Testing 56
New Thickness Coating Gage, A 412
Nickel Plate? Is the Salt Fog a Test for a "Poor" 372
Nomograph on Thicknesses of Electrodeposits 147
Non-Conductors, Metallizing 10, 61, 103

O

One Day Meeting Held by A. E. S. Delegates at Pittsburgh, June 18th 276
Oranges vs. Steel 288

P

Packaging, Cleaning Before 496
Patents 22, 67, 110, 159, 208, 252, 293, 340, 381, 417, 464, 507
Pearl Harbor's Metal Spraying School 450
Plated Coatings, The Choice of 154
Plating and Anodizing, Chemical Processing Prior to 368
Plating Locomotive and Passenger Equipment Car Parts 14
Plating of Die Castings on Full Automatic Conveyor 287
Plating of Fine Steel Wire with Nickel, Continuous 97
Plating Operations, Laboratory Control of 200
Plating and Polishing Industry—Straight-Time Average Hourly Earnings 454
Plating Tanks, A Simple Automatic Level Control for 102
Plating With Insoluble Anodes 144
Plating with Up-to-Date Factilities at Adel 202
Power Brush Burring of Steel Pipe 158

S

Salt Fog a Test for a "Poor" Nickel Plate?, Is the 372
Science Relating to Electroplating, Fundamentals of 371, 410
Silver and Copper From their Simplest Salts, Electrodeposition of 330
Simple Automatic Level Control for Plating Tanks, A 102
Small Tanks, Heating and Agitating 406
Sodium Hydride Descaling Process, The 492
Stainless Steel and Other Metals, Electrolytic Polishing of 280
Steel, Oranges vs. 288
Straight-Time, Average Hourly Earnings, Plating and Polishing Industry 454
Strike Solutions, Electrolytic Analysis of 497
Stripping Metallic Coatings, Taking It Off? 457

T

Taking It Off—Stripping Metallic Coatings 457
Technical Developments of 1944 2
Tin Plating, High-Speed Alkaline 52, 100
Treatment of Magnesium and Magnesium Alloys, The 408
Tropics, Corrosion in the 326

U

Up-to-Date Facilities at Adel, Plating with 202

W

Washington, This is 16, 64, 107, 156, 205, 249, 290, 336, 378, 417, 459, 504
Wearing Qualities of Gold Deposits 329

Y

Yesterdays, All Our 452

Z

Zinc Plate, The Cronak Process as Applied to 148

AUTHORS

Bandes, H. and Lo Presti, P. J., Heating and Agitating Small Tanks 406
Binai, Walter R., Plating With Insoluble Anodes .. 144
Black Anodizing Copper and Brass 247
Black, George—Taking It Off?—Stripping Metallic Coatings 457
Black, George, Cleaning Before Packaging 496
Black, Rodney E., and Holt, M. L., Electrodeposition of Iron-Tungsten Alloys from an Acid Plating Bath 150
Boggess, T. R., Plating Locomotive and Passenger Equipment Car Parts 14
Connolly, James H., and Rimbach, Richard, Continuous Platinng of Fine Steel Wire With Nickel 97
Covert, Arthur S., Nomograph on Thickness of Electrodeposits 1
Farber, H. L., The Choice of Plated Coatings 15
Gilbert, Dr. Harvey N., The Sodium Hydride Descaling Process 49
Gregory, J. N., and Hughan, R. R. Analysis of Silver Plating Solutions—A Simple Electrometric Method 37
Grupp, George, Corrosion in the Tropics 32
Grupp, George W., Pearl Harbor's Metal Spraying School 45
Grupp, George W., This is Washington 16, 64, 107, 156, 205, 249, 290, 336, 378, 417, 45
Haas, Joseph, Determininng the Area of Parts to be Plated 9
Hall, Nathaniel, and Hogaboom, Jr., G. B., Technical Developments of 1944 2
Hamilton, William F. and McKee, William E., Analysis of Hydrofluoric Nitric Acid Stainless Steel Pickling Bath 33
Harris, Jay C., Metal Cleaning: I—Indirect Performance Tests 23
Herr, Fred A., News from California 47, 80, 136, 180, 232, 271, 314, 356, 402, 433, 48
Hirdler, Carl, Chemical Processing Prior to Plating and Anodizing 36
Hogaboom, Sr., George B., Anodizing Aluminum .. 50
Hogaboom, Sr., George B., Is the Salt Fog a Test for a "Poor" Nickel Plate 37
Hogaboom, Sr., G. B., The Treatment of Magnesium and Magnesium Alloys 40
Hogaboom, Sr., George B., Wearing Qualities of Gold Deposits 32
Hogaboom, Jr., G. B., and Hall, Nathaniel, Technical Developments of 1944 2
Holt, M. L., and Black, Rodney E., Electrodeposition of Iron-Tungsten Alloys from an Acid Plating Bath 15
Hothersall, A. W., and Leadbeater, C. J., Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the B.N.F. Adhesion Test 191, 24
Hughan, R. R. and Gregory J. N., Analysis of Silver Plating Solutions A simple Electrometric Method 37
Kushner, Joseph B., A Simple Automatic Level Control for Plating Tanks 10
Leadbeater, C. J., and Hothersall, A. W., Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the B.N.F. Adhesion Test 191, 24
Lee, Ralph A., Human Engineering 27
Lipson, S., A New Thickness Coating Gage 41
Lo Presti, P. J., and Bandes, H., Heating and Agitating Small Tanks 40
Lowenheim, Frederick A., and Sternfels, Martin M., High-Speed Alkaline Tin Plating 52, 10
Makepeace, G. R., Etching Steel with Oxalic Acid Before Industrial Chromium Plating 36
Maxon, S. E., The Cronak Process as Applied to Zinc Plate 14
McKee, William E., and Hamilton, William F., Analysis of Hydrofluoric Nitric Acid, Stainless Steel Pickling Bath 33
McLean, John D., and Young, Dr. C. B. F., Black Anodizing Copper and Brass 24
Miceli, A. S., and Mosher, R. E., Electrolytic Determination of Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits 45
Mohler, J. B., A High pH Indium Cyanide Bath 60
Mohler, J. B., and Schaefer, R. A., Electrolytic Analysis of Strike Solutions 49
Mosher, R. E., and Miceli, A. S., Electrolytic Determination of Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits 45
Narcus, Harold, The Deposition of Metals From Fluoborate Solutions 188, 24
Rimbach, Richard, and Conolly, James H., Continuous Plating of Fine Steel Wire with Nickel 97
Rynkofs, Marcus D., Oranges vs. Steel 28
Schaefer, R. A., and J. B. Mohler, Electrolytic Analysis of Strike Solutions 49
Schoonover, H. A., Plating of Die Castings on Full Automatic Conveyor 28
Stedman, Gerald Eldridge, Plating with Up-to-Date Facilities at Adel 20
Sternfels, Martin M., and Lowenheim, Frederick A., High-Speed Alkaline Tin Plating 52, 10
Sweatt, H. B., Animal Glue in Abrasive Processes .. 41
Todd, Floyd, New Design of Humidity Cabinet for Corrosion Testing 5
Todd, Guerin, The Contribution of Electroplating Directly to the War Effort 8
Wein, Samuel, Metallizing Non-Conductors...10, 61, 10
Young, Dr. C. B. F., and McLean, John D., Black Anodizing Copper and Brass 24
Young, Dr. C. B. F., The Future of Electroplating 33
Zmeskal, Otto, Electrolytic Polishing of Stainless Steel and Other Metals 28

INDEX TO VOLUME 43

METAL FINISHING, January-December, 1945

ARTICLES

A

Abrasive Processes, Animal Glue in 415
A. E. S. Delegates at Pittsburgh, June 18th, One Day Meeting held by 276
All Our Yesterdays 452
Aluminum, Anodizing 500
Analysis of Hydrofluoric—Nitric Acid Stainless Steel Pickling Bath 332
Analysis of Silver Plating Solutions, A Simple Electrometric Method 374
Animal Glue in Abrasive Processes 415
Anode Rod, New Adjustable 13
Anodizing Aluminum 500
Area of Parts to be Plated, Determining the 94
Automatic Conveyor, Plating of Die Castings on Full 287

B

B.N.F. Adhesion Test, Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the 191, 245
Burring of Steel Pipe, Power Brush 158

C

California, News from 47, 80, 136, 180, 232, 271, 314, 356, 402, 433, 480, 525
Ceilings for Metal Finishing Services 195
Chemical Processing Prior to Plating and Anodizing 368
Choice of Plated Coatings, The 154
Chromium Plating, Etching Steel with Oxalic Acid Before Industrial 364
Cleaning Before Packaging 496
Coating Gage, A New Thickness 412
Continuous Plating of Fine Steel Wire with Nickel.. 97
Contribution of Electroplating Directly to the War Effort, The 8
Copper and Brass, Black Anodizing 247
Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits, Electrolytic Determination of 458
Corrosion in the Tropics 326
Corrosion Testing, New Design of Humidity Cabinet for 56
Cronak Processes as Applied to Zinc Plate, The ... 148
Cyanide Bath, A High pH Indium 60

D

Deposition of Metals From Fluoborate Solutions, The 188, 242
Descaling Process, The Sodium Hydride 492
Determining the Area of Parts to be Plated 94
Developments of 1944, Technical 2

E

Electrodeposition of Iron-Tungsten Alloys from an Acid Plating Bath 150
Electrodeposition of Silver and Copper from their Simplest Salts 330
Electrodeposits, Nomograph on Thickness of 147
Electrolytic Analysis of Strike Solutions 497
Electrolytic Determination of Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits 458
Electrolytic Polishing of Stainless Steel and Other Metals 280
Electrometric Method, Analysis of Silver Plating Solutions—A Simple 374
Electroplating Directly to the War Effort, The Contribution of 8
Electroplating Exhibit 207
Electroplating, The Future of 334
Engineering, Human 277
Exhibit, Electroplating 207
Etching Steel with Oxalic Acid Before Industrial Chromium Plating 364

F

Fluoborate Solutions, The Deposition of Metals From 188, 242
Fundamentals of Science Relating to Electroplating 371, 410
Future of Electroplating, The 334

G

Gold Deposits, Wearing Qualities of 329

H

Heating and Agitating Small Tanks 406
High pH Indium Cyanide Bath, A 60
High-Speed Alkaline Tin Plating 52, 100
Human Engineering 277
Hydrofluoric—Nitric Acid Stainless Steel Pickling Bath, Analysis of 332

I

Indirect Performance Tests—Metal Cleaning: I 238
Iron-Tungsten Alloys from an Acid Plating Bath, Electrodeposition of 150
Insoluble Anodes, Plating With 144
Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the B.N.F. Adhesion Test 191, 245

L

Laboratory Control of Plating Operations 200
Locomotive and Passenger Equipment Car Parts, Plating 14

M

Magnesium and Magnesium Alloys, The Treatment of 408
Master Metal Finishers Association of New England, Inc. 331
Metal Cleaning: I—Indirect Performance Tests 238
Metal Finishers Association of New England, Inc., Master 331
Metal Finishing Services, Ceilings for 195
Metallizing Non-Conductors 10, 61, 103
Metal Spraying School, Pear Harbor's 450

N

New Adjustable Anode Rod 13
New Design of Humidity Cabinet for Corrosion Testing 56
New Thickness Coating Gage, A 412
Nickel Plate? Is the Salt Fog a Test for a "Poor" 372
Nomograph on Thicknesses of Electrodeposits 147
Non-Conductors, Metallizing 10, 61, 103

O

One Day Meeting Held by A. E. S. Delegates at Pittsburgh, June 18th 276
Oranges vs. Steel 288

P

Packaging, Cleaning Before 496
Patents 22, 67, 110, 159, 208, 252, 293, 340, 381, 417, 464, 507
Pearl Harbor's Metal Spraying School 450
Plated Coatings, The Choice of 154
Plating and Anodizing, Chemical Processing Prior to 368
Plating Locomotive and Passenger Equipment Car Parts 14
Plating of Die Castings on Full Automatic Conveyor 287
Plating of Fine Steel Wire with Nickel, Continuous 97
Plating Operations, Laboratory Control of 200
Plating and Polishing Industry—Straight-Time Average Hourly Earnings 454
Plating Tanks, A Simple Automatic Level Control for 102
Plating With Insoluble Anodes 144
Plating with Up-to-Date Factilities at Adel 202
Power Brush Burring of Steel Pipe 158

S

Salt Fog a Test for a "Poor" Nickel Plate?, Is the 372
Science Relating to Electroplating, Fundamentals of 371, 410
Silver and Copper From their Simplest Salts, Electrodeposition of 330
Simple Automatic Level Control for Plating Tanks, A 102
Small Tanks, Heating and Agitating 406
Sodium Hydride Descaling Process, The 492
Stainless Steel and Other Metals, Electrolytic Polishing of 280
Steel, Oranges vs. 288
Straight-Time, Average Hourly Earnings, Plating and Polishing Industry 454
Strike Solutions, Electrolytic Analysis of 497
Stripping Metallic Coatings, Taking It Off? 457

T

Taking It Off—Stripping Metallic Coatings 457
Technical Developments of 1944 2
Tin Plating, High-Speed Alkaline 52, 100
Treatment of Magnesium and Magnesium Alloys, The 408
Tropics, Corrosion in the 326

U

Up-to-Date Facilities at Adel, Plating with 202

W

Washington, This is 16, 64, 107, 156, 205, 249, 290, 336, 378, 417, 459, 504
Wearing Qualities of Gold Deposits 329

Y

Yesterdays, All Our 452

Z

Zinc Plate, The Cronak Process as Applied to 148

AUTHORS

Bandes, H. and Lo Presti, P. J., Heating and Agitating Small Tanks 406
Binai, Walter R., Plating With Insoluble Anodes .. 144
Black Anodizing Copper and Brass 247
Black, George—Taking It Off?—Stripping Metallic Coatings 457
Black, George, Cleaning Before Packaging 496
Black, Rodney E., and Holt, M. L., Electrodeposition of Iron-Tungsten Alloys from an Acid Plating Bath 150
Boggess, T. R., Plating Locomotive and Passenger Equipment Car Parts 14
Connolly, James H., and Rimbach, Richard, Continuous Platinng of Fine Steel Wire With Nickel 97
Covert, Arthur S., Nomograph on Thickness of Electrodeposits 1
Farber, H. L., The Choice of Plated Coatings 15
Gilbert, Dr. Harvey N., The Sodium Hydride Descaling Process 49
Gregory, J. N., and Hughan, R. R. Analysis of Silver Plating Solutions—A Simple Electrometric Method 37
Grupp, George, Corrosion in the Tropics 32
Grupp, George W., Pearl Harbor's Metal Spraying School 45
Grupp, George W., This is Washington 16, 64, 107, 156, 205, 249, 290, 336, 378, 417, 45
Haas, Joseph, Determininng the Area of Parts to be Plated 9
Hall, Nathaniel, and Hogaboom, Jr., G. B., Technical Developments of 1944 2
Hamilton, William F. and McKee, William E., Analysis of Hydrofluoric Nitric Acid Stainless Steel Pickling Bath 33
Harris, Jay C., Metal Cleaning: I—Indirect Performance Tests 23
Herr, Fred A., News from California 47, 80, 136, 180, 232, 271, 314, 356, 402, 433, 48
Hirdler, Carl, Chemical Processing Prior to Plating and Anodizing 36
Hogaboom, Sr., George B., Anodizing Aluminum .. 50
Hogaboom, Sr., George B., Is the Salt Fog a Test for a "Poor" Nickel Plate 37
Hogaboom, Sr., G. B., The Treatment of Magnesium and Magnesium Alloys 40
Hogaboom, Sr., George B., Wearing Qualities of Gold Deposits 32
Hogaboom, Jr., G. B., and Hall, Nathaniel, Technical Developments of 1944 2
Holt, M. L., and Black, Rodney E., Electrodeposition of Iron-Tungsten Alloys from an Acid Plating Bath 15
Hothersall, A. W., and Leadbeater, C. J., Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the B.N.F. Adhesion Test 191, 24
Hughan, R. R. and Gregory J. N., Analysis of Silver Plating Solutions A simple Electrometric Method 37
Kushner, Joseph B., A Simple Automatic Level Control for Plating Tanks 10
Leadbeater, C. J., and Hothersall, A. W., Inspection Tests for the Adhesion of Electroplated Coatings With Particular Reference to the B.N.F. Adhesion Test 191, 24
Lee, Ralph A., Human Engineering 27
Lipson, S., A New Thickness Coating Gage 41
Lo Presti, P. J., and Bandes, H., Heating and Agitating Small Tanks 40
Lowenheim, Frederick A., and Sternfels, Martin M., High-Speed Alkaline Tin Plating 52, 10
Makepeace, G. R., Etching Steel with Oxalic Acid Before Industrial Chromium Plating 36
Maxon, S. E., The Cronak Process as Applied to Zinc Plate 14
McKee, William E., and Hamilton, William F., Analysis of Hydrofluoric Nitric Acid, Stainless Steel Pickling Bath 33
McLean, John D., and Young, Dr. C. B. F., Black Anodizing Copper and Brass 24
Miceli, A. S., and Mosher, R. E., Electrolytic Determination of Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits 45
Mohler, J. B., A High pH Indium Cyanide Bath 60
Mohler, J. B., and Schaefer, R. A., Electrolytic Analysis of Strike Solutions 49
Mosher, R. E., and Miceli, A. S., Electrolytic Determination of Copper and Zinc in Brass Plating Baths and in Brass Electrodeposits 45
Narcus, Harold, The Deposition of Metals From Fluoborate Solutions 188, 24
Rimbach, Richard, and Conolly, James H., Continuous Plating of Fine Steel Wire with Nickel 97
Rynkofs, Marcus D., Oranges vs. Steel 28
Schaefer, R. A., and J. B. Mohler, Electrolytic Analysis of Strike Solutions 49
Schoonover, H. A., Plating of Die Castings on Full Automatic Conveyor 28
Stedman, Gerald Eldridge, Plating with Up-to-Date Facilities at Adel 20
Sternfels, Martin M., and Lowenheim, Frederick A., High-Speed Alkaline Tin Plating 52, 10
Sweatt, H. B., Animal Glue in Abrasive Processes .. 41
Todd, Floyd, New Design of Humidity Cabinet for Corrosion Testing 5
Todd, Guerin, The Contribution of Electroplating Directly to the War Effort 8
Wein, Samuel, Metallizing Non-Conductors...10, 61, 10
Young, Dr. C. B. F., and McLean, John D., Black Anodizing Copper and Brass 24
Young, Dr. C. B. F., The Future of Electroplating 33
Zmeskal, Otto, Electrolytic Polishing of Stainless Steel and Other Metals 28